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Monthly Statistical Report

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AUGUST 1987

SUMMARY

August deliveries barely matched those of a year ago, though growth in consumption is still estimated at around 2 percent. Both gasoline's and kerosine jet fuel's slight increases belied indications of larger gains in consumption based on motor vehicle and airline traffic growth. Distillate's small increase, however, was in line with recent usage trends, and residual fuel oil's drop continued the pattern that has existed for most of this year due to a reversion to other fuels after last year's jump. Deliveries of other oils, too, were only about equal to last year's. Total deliveries' weak performance in August may in part have been due to hesitancy on the part of some distributors and end users to hold stocks while prices were weakening.

As noted last month, the Department of Energy's May deliveries data appeared unusually low. However, the Department's recently-released June data show much stronger deliveries—so much so, that when data for May and June are combined, Department of Energy and API two-month averages of total deliveries are within about half a percent of each other. As a result, the seven months' comparison for total deliveries, noted last month as possibly understating consumption trends, has now risen to 1.9 percent, more in line with indicated consumption growth and contrasting with August's weak performance.

Excluding residual fuel oil's swings, August's 1.0 percent rise for deliveries of the remaining products is also at variance with results for the previous seven months, which showed little, if any, slowdown from the second half of last year. During the last half of 1986, the growth in product deliveries other than residual fuel oil nearly doubled the 1.6 percent rate of the first half with an increase of 3 percent, in response to lower prices. So far this year, even including August's below-trend deliveries, the corresponding growth rate has been nearly as large—2.8 percent. Excluding August, the rate rises to 3.1 percent.

The decline in lower 48 crude oil production since early last year is estimated to have passed the 1 million B/D mark in August, a result of the large decline in the drilling of new wells and reduced upkeep of existing wells during the past year and a half. Even with the inclusion of Alaskan production, which has been relatively steady this year, total U.S. production has fallen 11 percent in the past 18 months.

Imports declined only slightly from July's recent-year record, to 7.4 million B/D, the continued higher level the result of strong imports for both crude oil and light products. Refinery utilization as a percent of operable capacity continued in the high 80s, as well as the emphasis on heavier product yields. Inventories, which had already been building from below-average levels since June, rose another 24 million barrels during the month. On a days supply basis, the increases of the past three months have brought inventories back to a level similar to that of August levels of recent previous years.

PRODUCT SUPPLIED [1/]

Motor Gasoline

VEHICLE MILES INDICATE GROWTH OF OVER 2 PERCENT.

Deliveries of motor gasoline in August rose only 0.7 percent —below the trend of recent months and a likely understatement of actual consumption growth as indicated by data on miles travelled. These data show year-to-year increases in motor vehicle travel averaging about 4 percent of late, but offsetting improvements in the vehicle fleet's efficiency have held gasoline consumption growth to less than this. Though the rate of increase in mile-per-gallon ratings of new vehicles has slowed somewhat in the last several years, the gap between the efficiency of new vehicles and that of the ones being replaced is still substantial, and overall fleet efficiency continues to improve at an estimated 1 to 2 percent annual rate. Thus, the growth in miles travelled suggests an increase in gasoline consumption in the neighborhood of 2.5 percent, essentially in agreement with the year-to-date deliveries increase of 2.3 percent.

API ESTIMATES

	AUGUST		YEAR-TO-DATE	
	Million B/D	Percent Change	Million B/D	Percent Change
Total domestic deliveries	16.6	(0.3)	16.5	1.6
Crude oil production[2/]	8.2	(2.6)	8.3	(6.0)
Total imports[3/]	7.4	3.3	6.3	6.8
Stocks (million bbl)[3/]	1,075	(0.2)	na	na

Unleaded's share of gasoline deliveries increased to over 77 percent in August after hovering near the 75 percent mark for several months, and represented a gain over last August of more than 8 percentage points. Marketing of midgrade unleaded has been proceeding as the supply of lead rights under the government's phasedown program has declined. As of the end of June, less than one fifth of the lead rights remained that had been accumulated by the end of 1985.

Distillates

SLIGHT GROWTH CONTINUES. Distillate deliveries for August rose 0.8 percent over those of a year ago, and the slight growth in consumption appears to be continuing. Transportation use has been the main contributor to that growth, with truck traffic recently rising about 5 percent year to year and rail traffic running about 9 percent ahead of last year. Industrial activity, up 3 to 4 percent on a year-to-year basis in recent months, has also provided a minor increment to demand. However, other sectors have been experiencing some partially offsetting declines. Due to reduced acreage this year, farm use has declined, and with housing starts and nonresidential construction both down, off-highway use has been cut as well.

Residual Fuel Oil

THIS YEAR'S DROP FALLS SHORT OF LAST YEAR'S GAIN. For August, residual fuel oil deliveries continued the year-to-year decline that has taken place since early in the year. Despite unusually hot weather in the Southeast, which may have lessened residual fuel oil's decline there because of the resulting demand for electricity, deliveries as a whole fell 13.7 percent or over 200 thousand B/D.

This year's decline in deliveries, though substantial, has not been as sharp as last year's rise. So far this year, deliveries have typically been running higher than in 1985, a year which turned out to be the end of an eight year, uninterrupted decline. This year's year-to-date deliveries have been about 7 percent higher than for two years ago, due mainly to electric utility usage that has remained above 1985 levels. Bunkering and industrial use have returned to levels near those of two years ago, as bunker purchases shifted to nondomestic sources and the fuel switching of last year was reversed.

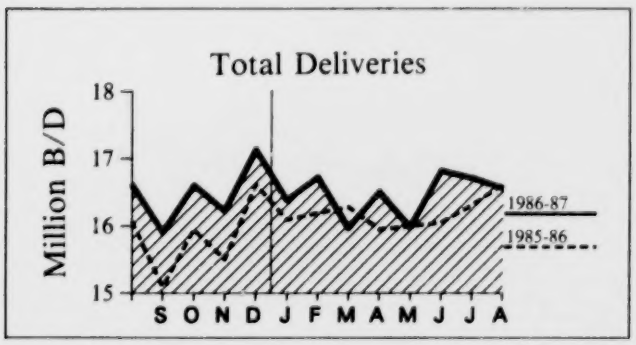
Kerosine Jet Fuel

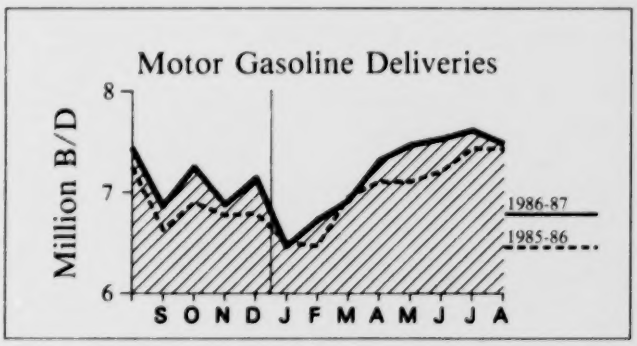
HIGHER LOAD FACTOR HOLDS TRAFFIC RISE. Revenue passenger miles have been showing large gains in recent months—rising over 12 percent in July, for example, the latest data available. However, these increases, in part due to a substantial recovery in international travel from last summer's depressed levels, have translated into a lesser increase in aircraft miles flown as load factors have risen from last summer's lower-than-usual rates. The increase in miles flown is estimated to be only about 5 percent, but even this exceeds August's 1 percent rise in kerosine jet fuel deliveries, suggesting that kerosine jet fuel consumption growth is continuing to run ahead of what is indicated by deliveries data.

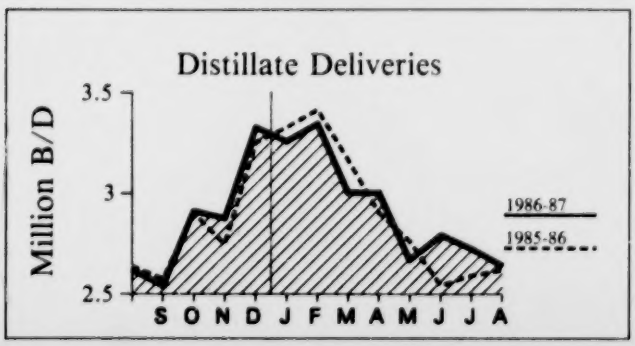
Other Oils

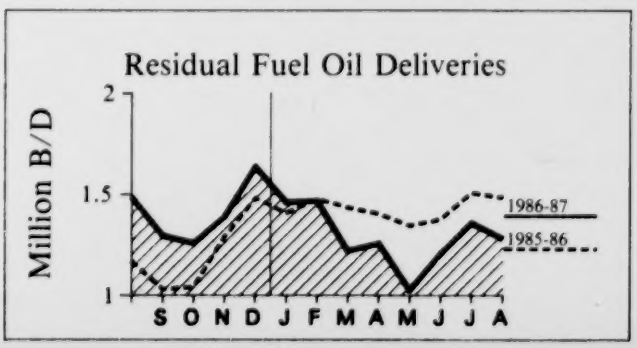
LITTLE CHANGE FROM AUGUST A YEAR AGO. Products supplied in the other oils category for August are estimated to be 4,003 thousand B/D, slightly lower than last month's estimate of 4,023 thousand B/D as well as that of the 4,023 thousand B/D also estimated for August 1986. The apparent weakness in deliveries is generally spread across the spectrum of all of the products within the category and, as with other products, may understate actual consumption for August.

Deliveries of naphtha and gasoil, which had been increasing at a brisk pace for much of this year, appear to have level-









ed off or even declined slightly in August. Propane, which had recently experienced modest increases in demand as a petrochemical feedstock due to its price competitiveness, also experienced some weakness in August. A slowdown in demand for petrochemicals for ethylene feedstock is responsible for much of the weakness in this product group.

In contrast to the significant seasonal upswing usually observed in August, asphalt and road oil deliveries are estimated have risen only slightly. However, the small change reflects the strong surge in July deliveries resulting from delays in passage of the Federal highway bill rather than weak August demand as such. Estimates for refinery gas are also unchanged or declining from last month as a result of steady rates of motor gasoline production.

It should be noted that the drop in deliveries from last year's levels is largely the result of unusually high August, 1986 deliveries as published by the Department of Energy. Last August's statistics include a 714 thousand B/D estimate for refinery gas, an all-time high for that product and 50-75 thousand B/D above the norm. When corrected for this and other aberrations, the other oils category would have shown a year-to-year increase of 1.0 to 1.5 percent.

SUPPLY [1/]

Production

LOWER 48 DECLINE PASSES 1 MILLION BARRELS PER DAY.

The production decline in the lower 48 in August passed the 1 million B/D mark compared with early last year, a 14 percent drop within a year and a half. Over the past 6 months, production outside Alaska has been declining at an annual rate of about 7 percent—less than the 16 percent annual rate of the second and third quarters of 1986 but still enough to amount to a loss of about 450 thousand B/D per year. Earlier this year, the production decline in the lower 48 had temporarily slowed.

In Alaska, completion of new facilities at Lisburne and Kuparuk late last year have helped to boost production this year by an average 80 thousand B/D in year-to-year comparisons, and since that time Alaskan production has been relatively steady. Even with the inclusion of Alaska's gain, U.S. crude oil production has fallen 11 percent since early 1986.

Natural gas liquids production in August is estimated to have risen almost 10 percent over last August's depressed level, or by 140 thousand B/D. However, competition from low crude oil prices last year had discouraged the extraction of liquids from natural gas, causing production to drop. When compared with levels prior to last year's crude oil price slide, August's natural gas liquids gain is seen to be a recovery to 1985 production levels rather than an indication of new growth.

Imports

DOWN ONLY SLIGHTLY FROM JULY'S RECENT-YEAR RECORD.

Total imports edged downwards from July's recent-year record in August, though crude oil imports were actually even slightly higher than in the prior month. Persian Gulf tensions, combined with ready availability of crude oil from OPEC producers, have helped to spur imports above current needs in the past several months. Nevertheless, the bulk of August's 7.4 million B/D in imports went towards filling the gap between falling domestic production and generally rising consumption.

Though crude oil imports were almost 550 thousand B/D higher than last August—already a high month by recent historical standards—product imports declined about 290 thousand B/D, mainly because of a drop in residual fuel oil imports from an unusually high level a year ago. Imports of finished gasoline and blending components remained strong in August, reaching 553 thousand B/D, a 153 thousand B/D increase from a year ago. Distillate imports, though down about 63 thousand B/D from last August, remained at a higher-than-average level for the month as well.

Refinery Operations

UTILIZATION RATE CONTINUES IN HIGH 80s FOR AUGUST.

Percentage refinery utilization continued in the high 80s in August, slipping 0.6 percentage points from last year only because of somewhat greater distillation capacity this year; input to distillation units actually increased by a full percentage point from a year ago.

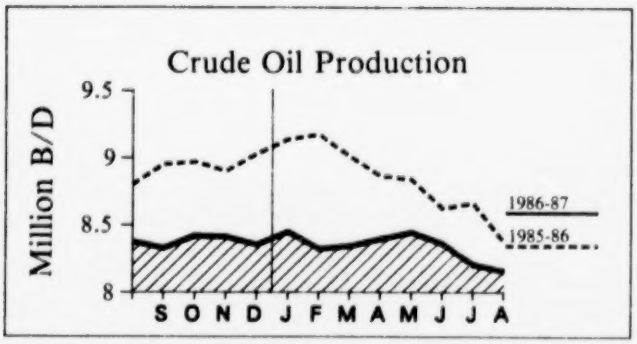
Despite the increase in input, output of most major light products fell. Gasoline production declined 2 percent and distillate, almost 8 percent from last August, in response to the nearly flat deliveries for both for the month. Kerosine jet fuel production, however, rose over 10 percent while residual fuel oil output rose nearly 4 percent, edging out imports of that product in a shrinking market.

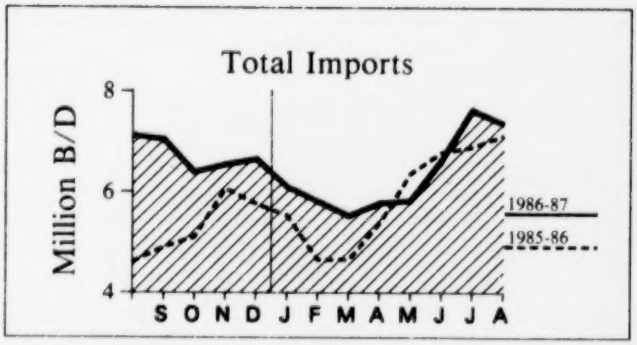
Inventories

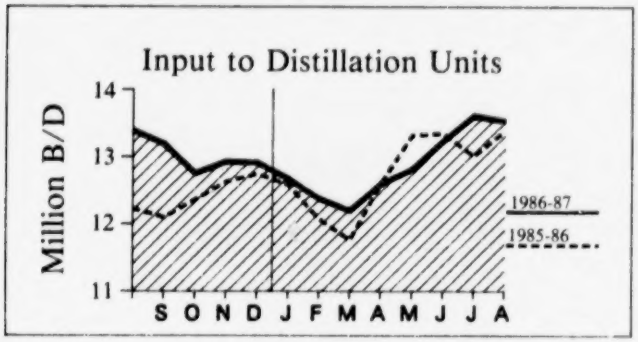
STOCKS RISE FOR THIRD MONTH FROM EARLIER LOW LEVELS.

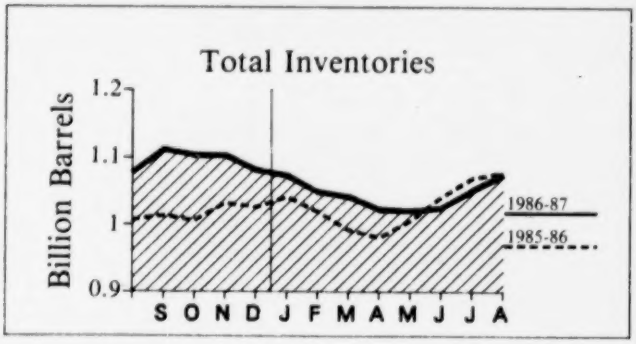
Continuing the increases of June and July, inventories rose another 24 million barrels in August as continued high imports, much of which were loaded in July, arrived at U.S. ports. About 9 million barrels of the increase was accounted for by a seasonal rise for distillates. Though distillate stocks at the end of the month were 14 million barrels lower than last year, at 124 million barrels, they were still 10 million barrels higher than two years ago and not out of line with historical seasonal patterns. Gasoline stocks declined 4 million barrels while crude oil stocks rose 6 million barrels.

The increase from below-average levels during the last several months has brought total inventories, as measured in terms of days of supply, to 65 days, a typical level for August in recent years but still well below the level of the early 1980s.









1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 532 million barrels as of August 31, 1987).

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

Products Supplied/Supply From Primary Storage	AUGUST			YEAR-TO-DATE		
	1987[1]	1986[2]	% Change	1987[3R]	1986[2]	% Change
Products Supplied:						
Total motor gasoline	7,484	7,435	0.7	7,196	7,033	2.3
Finished leaded motor gasoline*	1,702	2,297	(25.9)	1,808	2,254	(19.8)
Finished unleaded motor gasoline*	5,782	5,138	12.5	5,388	4,779	12.7
Naphtha-jet	242	188	28.7	205	200	2.5
Kerosine-jet	1,176	1,164	1.0	1,134	1,083	4.7
Distillate fuel oil	2,641	2,621	0.8	2,925	2,913	0.4
Residual fuel oil	1,281	1,485	(13.7)	1,284	1,429	(10.1)
All other oils[4]	4,003	4,023	(0.5)	3,968	3,833	3.5
Reclassified[5]	- 267	- 298	(10.4)	- 261	- 306	(14.7)
Total domestic products supplied	16,560	16,618	(0.3)	16,451	16,185	1.6
Exports	662	868	(23.7)	766	778	(1.5)
Total products supplied	17,222	17,486	(1.5)	17,217	16,963	1.5
Supply:						
Domestic production:						
Crude oil[6]	8,155	8,374	(2.6)	8,304	8,832	(6.0)
Natural gas liquids	1,585	1,445	9.7	1,592	1,565	1.7
Other supply[7]	897	808	11.0	960	845	13.6
Total domestic supply	10,637	10,627	0.1	10,856	11,242	(3.4)
Imports:						
Crude oil, total	5,354[10/]	4,809[10/]	11.3	4,433[10/]	3,908[10/]	13.4
Canadian	679	571	18.9	611	558	9.5
Other	4,675	4,238	10.3	3,822	3,350	14.1
Products, total	1,997	2,308	(13.5)	1,903	2,026	(6.1)
Residual fuel oil	507	793	(36.1)	575	657	(12.5)
Other	1,490	1,515	(1.7)	1,328	1,369	(3.0)
Total imports	7,351	7,117	3.3	6,336	5,934	6.8
Total supply	17,988	17,744	1.4	17,192	17,176	0.1
Stock change, all oils	+ 766	+ 258	XXXX	- 25	+ 213	XXXX
Refinery Operations						
Input to crude oil distillation units	13,530	13,392	1.0	12,885	12,766	0.9
Operable capacity	15,692	15,430	1.7	15,662	15,469	1.2
Refinery utilization (%)[8]	86.2%	86.8%	(0.7)	82.3%	82.5%	(0.2)
Crude oil runs	13,380	13,287	0.7	12,775	12,657	0.9

Stocks (millions bbls.)	1987		1986[2]	% Change from ...	
	Aug. 31[9]	July 31[9]	Aug. 31	Previous Month	Year Ago
Crude oil [10/]	333.8	327.8	332.7	1.8	0.3
Unfinished oils	103.5	100.7	97.8	2.8	5.8
Total motor gasoline**	225.7	229.5r/	221.6	(1.7)	1.9
Finished leaded motor gasoline*	53.5	54.6	69.4	(2.0)	(22.9)
Finished unleaded motor gasoline*	134.0	135.5r/	118.0	(1.1)	13.6
Naphtha-jet	6.8	7.6	6.6	(10.5)	3.0
Kerosine-jet	40.9	40.1	41.9	2.0	(2.4)
Distillate fuel oil	123.8	114.5	137.7	8.1	(10.1)
Residual fuel oil	42.8	41.8r/	41.3	2.4	3.6
All other oils	197.5	189.1r/	197.7	4.4	(0.1)
Total all oils	1,074.8	1,051.1r/	1,077.3	2.3	(0.2)

1/ Based on API estimated data converted to a monthly basis.
2/ Source: U.S. Department of Energy.
3/ Source: January-June, U.S. Department of Energy, July-August, API.
4/ Includes crude losses.
5/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
6/ Includes lease condensate.
7/ Includes Unaccounted-for crude oil, Refinery input of other hydrocarbons, and Processing gain.
8/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."
9/ Derived by interpolating API weekly stocks data.
10/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
R/ Revised.
* Included in motor gasoline.
** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.